



(12) **EUROPEAN PATENT APPLICATION**  
published in accordance with Art. 158(3) EPC

(43) Date of publication:  
**14.06.2000 Bulletin 2000/24**

(51) Int. Cl.<sup>7</sup>: **H05B 33/22, H05B 33/14**

(21) Application number: **99926765.1**

(86) International application number:  
**PCT/JP99/03339**

(22) Date of filing: **23.06.1999**

(87) International publication number:  
**WO 00/01203 (06.01.2000 Gazette 2000/01)**

(84) Designated Contracting States:  
**DE FR GB**

(30) Priority: **26.06.1998 JP 18064098**

(71) Applicant:  
**IDEMITSU KOSAN COMPANY LIMITED**  
**Tokyo 100-0005 (JP)**

(72) Inventors:  
• **SAKAI, Toshio**  
**Sodegaura-shi, Chiba 299-0293 (JP)**  
• **HOSOKAWA, Chishio**  
**Sodegaura-shi, Chiba 299-0293 (JP)**

(74) Representative:  
**Gille Hrabal Struck Neidlein Prop Roos**  
**Patentanwälte,**  
**Brucknerstrasse 20**  
**40593 Düsseldorf (DE)**

(54) **LUMINESCENT DEVICE**

(57) The present invention relates to a luminescent device having a plurality of organic EL (Electroluminescence) elements in which at least a charge injection layer and a light-emitting layer are interposed between a pair of electrodes. It is a luminescent device in which plural sets of anodes and cathodes are arranged opposite to each other, and the charge injection layer and the light-emitting layer are formed between these anodes

and cathodes, whereby a plurality of the organic EL elements can be controlled independently luminescence. The conductivity  $\sigma$  of the charge injection layer is set such that a leakage current from the organic EL element is 1/100 or less of the current passed through the organic EL element.

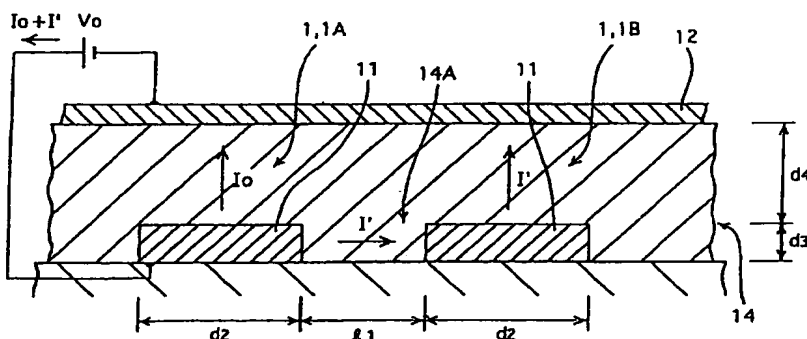


Fig. 1